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10/532,572	02/06/2006	Angus Peter Robson	12000057-0006-002	4280

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EXAMINER

CHUKWURAH, NATHANIEL C

ART UNIT	PAPER NUMBER
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3721

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,572	Applicant(s) ROBSON, ANGUS PETER	
	Examiner NATHANIEL CHUKWURAH	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the Argument/remarks filed on 10/19/2010.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 34-40, 41-43 and 45-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Jackson (US 1,731,576).

With regard to claim 34, Jackson discloses a hammer assembly, including:

a housing (1, 3); a hammer (4, 5) received in the housing (3); and a drive mechanism (20, 22, 25) for reciprocating the hammer (4, 5), wherein the hammer is a substantially elongated weight with first and second tool ends (6, 7) located at opposing longitudinal ends of the weight, such that in use the hammer and the first and second tool ends (6, 7) reciprocate synchronously, where either the first or second tool end extends through a lower opening end in the housing to strike an external working surface during each cycle of the reciprocation, the hammer assembly characterised in that the hammer is capable of being removed from the housing, reversed and replaced in the housing, enabling either of the first and second tool ends orientated to extend through the lower opening end in the housing to be interchanged.

With regard to claim 35, Jackson shows wherein the hammer (4, 5) includes at least one protrusion (13 shoulder Fig. 4) on each of two opposing hammer faces adapted for engagement with the drive mechanism (20, 22, 25).

With regard to claim 36, Jackson shows wherein the hammer (4, 5) includes at least two protrusions (9, 13) adapted for engagement with the drive mechanism (20, 22, 25), the protrusions being located on a common hammer face.

With regard to claim 37, Jackson shows wherein the hammer (4, 5) includes a protrusion (13) thereon and the drive mechanism (20, 22, 25) includes a loop of chain (22, 26) having at least one dog (23) fixed thereto and a motor (25) for rotating the chain (22, 26), the dog (23) abutting the protrusion (9, 13) to lift the hammer (4, 5) away from the opening end of the housing (3).

With regard to claim 38, Jackson shows the housing which is configured for attachment to other machine as shown in Figure 1 and the drive mechanism (24, 25) is enclosed within the housing (1, 3).

With regard to claims 39 and 40, Jackson shows a cushion (14) fixed near the opening end of the housing (1, 3) for engaging the protrusion (13).

With regard to claim 41, Jackson shows wherein the hammer (4, 5) is adapted to drop under gravity (Fig. 1) toward the opening end of the housing before striking the working surface.

With regard to claim 42, Jackson shows wherein the drive mechanism (20, 22, 25) includes means (9, 13) for engaging and driving the hammer from the housing to strike the working surface.

With regard to claim 43, Jackson shows wherein the hammer is propelled (when it drops) to strike the working surface by gravity and by engagement with the drive mechanism.

With regard to claim 45, Jackson shows wherein the hammer (6, 7) is multifaceted.

With regard to claim 46, Jackson shows wherein the opposing hammer tool ends are non-identical (6, 7).

With regard to claim 47, Jackson shows wherein the tool ends are configured as a substantially flat surface and/or a spike.

With regard to claim 48, Jackson shows wherein the drive mechanism (20, 22, 25) configured to lift the hammer includes at least two sprockets (20, 21), and at least one dog (23) and a chain (22).

With regard to claim 49, Jackson shows wherein a dog (23) is attached to a chain (22) and is adapted to engage the protrusion (13).

With regard to claim 50, Jackson shows wherein a chain (22) is adapted to be rotated around the at least two sprockets (20, 21).

With regard to claim 51, Jackson shows wherein sprockets (20, 21), dog (23) and chain (22) are aligned substantially parallel to the hammer (4, 5).

With regard to claim 52, Jackson shows wherein sprockets (20, 21), dog (23) and chain (22) are aligned substantially perpendicular to the hammer (in a different orientation).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 44 and 53-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson (US 1,731,576) in view of Robson (US 5,363,835).

With regard to claim 44, Jackson discloses the substantially the invention but fails to show wherein the hammer is cylindrical. Robson teaches that it is old and well known in the art to provide hammer (2, 7) that is cylindrical in shape. Thus, it would have been obvious to one skilled in the art to modify Jackson hammer by providing the cylindrical hammer which has the same advantage as other types of hammer for the purpose of breaking an object.

With regard to claim 53, modified Jackson invention includes a connecting apparatus (22 Robson) between the hammer and the hammer housing.

With regard to claim 54, modified Jackson invention connecting apparatus (22 Robson) is capable of elastic deformation.

With regard to claim 55, modified Jackson invention connecting apparatus (22 Robson) is considered detachable.

6. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson (US 1,731,576) in view of Kikel (US 4, 848,197).

With regard to claim 56, Jackson discloses the substantially the invention but fails to show the steps of: withdrawing the hammer from the housing, reversing the orientation of the hammer, and reinserting the hammer into the housing.

Kikel discloses a multiple bit of interchanging tool ends including tool housing (2), and a method step of, withdrawing the tool bit (5) considered to be a hammer since the bit can be used as a hammer by hitting with the tool bit; reversing and reinserting the tool into the housing (2).

Thus, it would have been obvious to one skilled in the art to provide Jackson with the step of withdrawing, reversing and reinserting the tool into the housing for the purpose of doing task required of a different tool end.

Response to Arguments

7. Applicant's arguments filed 10/19/2010 have been fully considered but they are not persuasive.

Applicant is arguing on page 7, that hammer of the present invention is a substantially elongated weight with first and second tool ends located at opposing longitudinal ends of the weight, and that the crosshead 4 of Jackson is not a substantially elongated weight, and the first and second tool ends (6, 7) cannot be simultaneously at opposing longitudinal ends of the weight (4, 5).

The examiner contends that Jackson's invention meets the claimed limitation, for example, the hammer of Jackson is considered one integral part even though it has different components, and the hammer, including the elongated rod with chisel end is considered elongated having simultaneously two opposing ends. Either end of the tool can strike external working surface.

Applicant further argues that, the hammer weight itself is not "capable of being removed from the housing, reversed and replaced in the housing, enabling either of the first and second tool ends orientated to extend through the lower opening end in the housing to be interchanged".

The examiner contends that hammer weight and the rod having chisel end is considered one integral part and the rod is further considered removable and can be reversed and reoriented to extend through the lower end of the housing.

Applicant remarked that the chisel will be damaged when reversed and exposed to impact. Jackson disclosed on page 1, lines 85-90, that the drop hammer impacts the crosshead and crosshead impacts the chisel, and no damage is incurred on the chisel.

Jackson does not teach away from the present invention, Jackson meets the claimed limitation, the anticipation rejection is proper.

Further, examiner chose Kikel to teach tool with two interchangeable ends is well known in the art.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHANIEL C. CHUKWURAH whose telephone number is (571)272-4457. The examiner can normally be reached on M-F 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nathaniel C. Chukwurah/
Examiner, Art Unit 3721

/Rinaldi I Rada/
Supervisory Patent Examiner, Art Unit 3721

12/28/2010